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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/681,391	03/28/2001	Stephen A. Byrne	85VF-00003	3266
23465	7590	07/19/2005	EXAMINER	
JOHN S. BEULICK C/O ARMSTRONG TEASDALE, LLP ONE METROPOLITAN SQUARE SUITE 2600 ST LOUIS, MO 63102-2740			BORISSOV, IGOR N	
		ART UNIT		PAPER NUMBER
		3639		
DATE MAILED: 07/19/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/681,391	BYRNE ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Igor Borissov	3639	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 18 April 2005.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-45 is/are rejected.
- 7) Claim(s) 13-18 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)  
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) Notice of Informal Patent Application (PTO-152)  
6) Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Objections***

Claims 13-18 are objected to because of the following informalities:

Claim 13 is not in compliance with MPEP 608.01(i),(m) which states that a preamble should be separated from a body of a claim by a term "comprising".

Claims 14-18 are objected to as being dependent on Claim 13.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

**Claims 1-3, 5-9, 19-22 and 40-43 are rejected under 35 U.S.C. 101** because the claimed invention is directed to non-statutory subject matter. The claimed invention is not within the technological arts.

As an initial matter, the United States Constitution under Art. I, §8, cl. 8 gave Congress the power to "[p]romote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries". In carrying out this power, Congress authorized under 35 U.S.C. §101 a grant of a patent to "[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition or matter, or any new and useful improvement thereof." Therefore, a fundamental premise is that a patent is a statutorily created vehicle for Congress to confer an exclusive right to the inventors for "inventions" that promote the progress of "science and the useful arts". The phrase "technological arts" has been created and used by the courts to offer another view of the term "useful arts". See *In re Musgrave*, 167 USPQ (BNA) 280 (CCPA 1970). Hence, the first test of

whether an invention is eligible for a patent is to determine if the invention is within the "technological arts".

Further, despite the express language of §101, several judicially created exceptions have been established to exclude certain subject matter as being patentable subject matter covered by §101. These exceptions include "laws of nature", "natural phenomena", and "abstract ideas". See *Diamond v. Diehr*, 450, U.S. 175, 185, 209 USPQ (BNA) 1, 7 (1981). However, courts have found that even if an invention incorporates abstract ideas, such as mathematical algorithms, the invention may nevertheless be statutory subject matter if the invention as a whole produces a "useful, concrete and tangible result." See *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* 149 F.3d 1368, 1973, 47 USPQ2d (BNA) 1596 (Fed. Cir. 1998).

This "two prong" test was evident when the Court of Customs and Patent Appeals (CCPA) decided an appeal from the Board of Patent Appeals and Interferences (BPAI). See *In re Toma*, 197 USPQ (BNA) 852 (CCPA 1978). In *Toma*, the court held that the recited mathematical algorithm did not render the claim as a whole non-statutory using the Freeman-Walter-Abele test as applied to *Gottschalk v. Benson*, 409 U.S. 63, 175 USPQ (BNA) 673 (1972). Additionally, the court decided separately on the issue of the "technological arts". The court developed a "technological arts" analysis:

*The "technological" or "useful" arts inquiry must focus on whether the claimed subject matter...is statutory, not on whether the product of the claimed subject matter...is statutory, not on whether the prior art which the claimed subject matter purports to replace...is statutory, and not on whether the claimed subject matter is presently perceived to be an improvement over the prior art, e.g., whether it "enhances" the operation of a machine. *In re Toma* at 857.*

In *Toma*, the claimed invention was a computer program for translating a source human language (e.g., Russian) into a target human language (e.g., English). The court found that the claimed computer implemented process was within the

"technological art" because the claimed invention was an operation being performed by a computer within a computer.

The decision in *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* never addressed this prong of the test. In *State Street Bank & Trust Co.*, the court found that the "mathematical exception" using the Freeman-Walter-Abele test has little, if any, application to determining the presence of statutory subject matter but rather, statutory subject matter should be based on whether the operation produces a "useful, concrete and tangible result". See *State Street Bank & Trust Co.* at 1374. Furthermore, the court found that there was no "business method exception" since the court decisions that purported to create such exceptions were based on novelty or lack of enablement issues and not on statutory grounds. Therefore, the court held that "[w]hether the patent's claims are too broad to be patentable is not to be judged under §101, but rather under §§102, 103 and 112." See *State Street Bank & Trust Co.* at 1377. Both of these analysis goes towards whether the claimed invention is non-statutory because of the presence of an abstract idea. Indeed, *State Street* abolished the Freeman-Walter-Abele test used in *Toma*. However, *State Street* never addressed the second part of the analysis, i.e., the "technological arts" test established in *Toma* because the invention in *State Street* (i.e., a computerized system for determining the year-end income, expense, and capital gain or loss for the portfolio) was already determined to be within the technological arts under the *Toma* test. This dichotomy has been recently acknowledged by the Board of Patent Appeals and Interferences (BPAI) in affirming a §101 rejection finding the claimed invention to be non-statutory. See *Ex parte Bowman*, 61 USPQ2d (BNA) 1669 (BdPatApp&Int 2001).

Contrary to the claims in the above-cited cases, in the present application, the claims are completely silent with regard to technology and is purely an abstract idea or process steps that are employed completely without the use of any technology whatsoever. The method claims are no more than a suggested idea of making a decision if any violation of equipment usage has occurred based on obtained

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information. The claims are completely devoid of any means to carry out a process implementing the step of: *receiving meter data related to equipment usage; applying validation rules to the meter data; and generating an error report identifying meter data that violates at least one of the validation rules.*

Section 100 (b) of Title 35 U. S. C. defines "process" to mean "process, art or method, and includes a new use of a known process, machine, manufacture, composition of matter, or material." "When Congress approved the addition of the term "process" to the categories of patentable subject matter in 1952, it incorporated the definition of "process" that had evolved in the courts" (footnotes omitted), See *In re Schrader*, 22 F. 3d 290, 295, 30 USPQ2d 1455, 1459 (Fed. Cir. 1994), which included this definition from *Cochrane v. Deener*, 94 U. S. 780, 788 (1877): "A process is ... an act, or series of acts, performed upon the subject matter to be transformed and reduced to a different state or thing."

Claims in the present application do not transform any physical subject matter or tangible (matter) into a different state of thing, and can be performed manually by a human.

The examiner recognizes that a statutory "process" under § 101 does not have to be performed by a machine, there must be a transformation of physical subject matter from one state to another, e.g., a step of "mixing" two chemicals transforms two separate chemicals into a manufacture or a composition of matter, regardless of whether it is performed by a human or a machine.

Claims in the present application do not recite transformation of physical subject matter.

The examiner further recognizes that "subject matter" transformed does not need to be a physical (tangible) object or article or substance. Under the *State Street* test transformation of electrical signals into a different state or signal within a computer could constitute a machine implementation if the result has some practical utility.

However, in accordance with MPEP 2106 (IV)(B)(2)(b) "Statutory Process Claims", not all processes are statutory under 35 U.S.C. 101. *Schrader*, 22 F.3d at 296, 30 USPQ2d at 1460. To be statutory, a claimed computer related process must either:

(A) result in a physical transformation outside the computer for which a practical application in the technological arts is either disclosed in the specification or would have been known to a skilled artisan, or (B) be limited to a practical application within the technological arts. See *Diamond v. Diehr*, 450 U.S. at 183-184, 209 USPQ at 6 (quoting *Cochrane v. Deener*, 94 U.S. 780, 787-788 (1877)). The claims in the present application do not appear to satisfy either of the two conditions listed above. First, the claims do not include limitations that would suggest a computer is being used to transform the data from one form to another that would place the invention in the technological arts. Second, disregarding the fact that there is no computer claimed that would physically transform the data, there does not appear to be any physical transformation of data. Thus, there neither appears to be any physical transformation of data from one form to another, which is based upon an algorithm or a calculation by a computer or processor, nor is there any technology claimed that would be used to transform the data.

As to technological arts recited in the preamble, mere recitation in the preamble (i.e., intended or field of use) a network system, or mere implication of employing a machine or article of manufacture to perform some or all of the recited steps does not confer statutory subject matter to an otherwise abstract idea unless there is positive recitation in the claim as a whole to breathe life and meaning into the preamble.

Because the independently claimed invention is directed to an abstract idea which does not recite a limitation in the technological arts, those claims are not permitted under 35 USC 101 as being related to non-statutory subject matter. However, in order to consider those claims in light of the prior art, examiner will assume that those claims recite statutorily permitted subject matter.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1 13 23 29 rejected under 35 U.S.C. 102(e) as being anticipated by Coons et al. (US 6,832,250).

Coons et al. (Coons) teaches a method and system for remotely monitoring office equipment, comprising:

Independent Claims

Claims 1, 13, 23, 29, 23, 29, 36, 40 and 44.

Receiving meter data related to equipment usage (C. 3, L. 10-16; C. 4, L. 15-20); applying logic to the received data (C. 7, L. 15-21); generating a report regarding received data (C. 9, L. 10-20). The specific content of the report cannot change the "generating" step, therefore not given patentable weight. *Nonfunctional* descriptive material cannot render nonobvious an invention that would have otherwise been obvious. Cf. *In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983)

Claim 19. Coons teaches said system for remotely monitoring office equipment, comprising a database including information regarding customer identification, invoices for the customer, and billing data (C. 8, L. 49-57).

Dependent Claims

Claim 2. Said method, wherein said usage data is received in a predefined format (C. 8, L. 61-62).

Claims 3, 14, 18, 22, 28, 30, 34 and 39. Said method, wherein said usage data includes information regarding invoicing (C. 8, L. 49-57).

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Claim 4. Said method, wherein said usage data is received via the Internet (C. 4, L. 55-56).

Claim 5, 15, 20, 24 and 31. Said method, wherein said logic is applied to the meter data (C. 7, L. 15-21). The specific content of the logic cannot change said method step, therefore is given no patentable weight. MPEP 2106 (II) (C) states: "Language that suggests or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation."

Claims 8, 17, 21, 25, 27, 33 and 38. Said system, wherein the report is accessible over the Web site (C. 8, L. 61-64; C. 9, L. 17-20).

Claim 9. See reasoning applied to Claim 8. The specific content of the report can not change said method step, therefore is given no patentable weight. MPEP 2106 (II) (C) states: "Language that suggests or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation."

Claims 16, 26, 32. Said system as in Claims 13, 23 and 29. Language as to "*wherein generating an error report comprises...*" does not recite structural elements, and, therefore, is given no patentable weight. MPEP 2106 (II) (C) states: "Language that suggests or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation."

Claim 35. Said system as in Claims 29. Language as to "*wherein said payable file further comprises ...*" does not recite structural elements, and, therefore, is given no patentable weight. MPEP 2106 (II) (C) states: "Language that suggests or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation."

Claims 41-43. See reasoning applied to Claim 40.

Claim 45. Said system, wherein the server is configured to generate a report regarding received data (C. 9, L. 10-20). Language as to the specific content of the report does not recite structural elements, and, therefore, is given no patentable weight. MPEP 2106 (II) (C) states: "Language that suggests or makes optional but does not

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require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation."

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6, 7 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coons in view of Manduley (US 5,956,505).

Claims 6, 7 and 37. Coons teaches all the limitations of Claims 6, 7 and 37, except specifically teaching determining whether an error is due to received meter data.

Manduley teaches a method and system for remote monitoring of office equipment, including receiving data regarding usage of said equipment; storing said data as a file; producing a report regarding said data; and determining whether an error is found in respect to the customer' file (C. 8, L. 6-8).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Coons to include determining whether an error is due to received meter data, as disclosed in Manduley, because it would advantageously enhance the accuracy of the report.

***Examiner's Note***

The IDS form 1449A submitted on 7/30/2001 refers to Application No. 09/681,412, and, therefore, is not considered.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure (see form PTO-892).

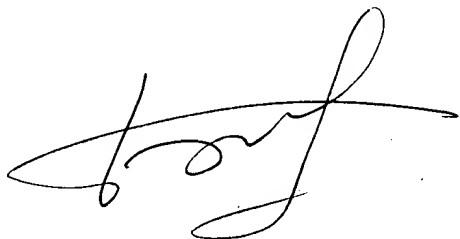
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Igor Borissov whose telephone number is 571-272-6801.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Hayes can be reached on 571-272-6708.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Igor Borissov  
Patent Examiner  
Art Unit 3639



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7/9/2005